REMARKS

This Application has been carefully reviewed in light of the Office Action mailed November 5, 2003. Applicants have made clarifying amendments to Claims 1 and 3-7 to further clarify, more particularly point out, and more distinctly claim at least some of the various patentable distinctions over the prior art previously present in Applicants' claims. Applicants make no admission that these amendments narrow the scope of the claims or that the amendments are required for patentability. Applicants have also added new Claims 8-20, which particularly point out and distinctly claim additional subject matter that is patentable over the prior art. Applicants respectfully request further examination, reconsideration of previously presented claims, consideration of new claims, and favorable action.

Section 112 Rejections

The Examiner rejects Claims 5-7 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner notes that Claim 5 depends upon itself. Applicants have amended Claims 5-7 such that each claim now depends on independent Claim 4. Thus, the Examiner's reason for holding Claims 5-7 no longer applies. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Section 103 Rejections

The Examiner rejects Claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,636,242 to Bowman-Amuah ("*Bowman-Amuah*") in view of U.S. Patent No. 6,549,956 to Bass et al. ("*Bass*"). The Examiner also rejects Claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,734,837 to Flores et al. ("*Flores*") in view of *Bass*. Applicants respectfully traverse these rejections and submit the following arguments for the allowability of the claims over the cited references.

Flores, Bowman-Amuah,* and *Bass,* Taken Singly or in Combination, Fail to Disclose,
Teach, or Suggest Numerous Limitations Recited in Applicants' Claims

Flores discloses a "method and system which provides consultants, business process analysts, and application developers with a unified tool with which to conduct business process analysis, design, [and] documentation and to generate business process definitions and workflow-enable applications." (Abstract, lines 6) The workflow application builder 67 of *Flores* "created or edits the workflow definition databases that define the business process and that will be used by the workflow server." (Column 6, lines 15-17) The application builder also "generates forms and views for client workflow enabled applications." (Column 6, lines 17-19) The workflows created or analyzed by the application builder may include states, and user-defined scripts may be executed in association with particular states. (Column 19, lines 34-39) The states themselves may be used as logical expressions in the user-defined scripts executed for a particular state. (Column 19, lines 40-41) For example, delay a workflow from moving from state to state until certain conditions are met. (Column 19, lines 41-43)

Significantly, the preferred embodiment of the workflow application builder of *Flores* is based on a Model-View-Controller (MVC) paradigm of object-oriented programming. (Column 31, lines 64-66) The MVC paradigm divides an application into three main divisions: Model, which represents core application logic; View, which represents the user interface logic; and Controller, which represents the message and event handling logic that implements the tools for the manipulation of objects. (Column 31, line 67 through Column 32, line 5) According to *Flores*, the MVC framework for applications provides a logical split of the different functions in a GUI application. (Column 32, lines 6-7) Furthermore, according to *Flores*, the further logical separation of event handling in the Controller from the user interface in the View enables the application to be more easily ported into another GUI environment. (Column 32, lines 10-13)

Bowman-Amuah discloses a system, method, and article of manufacture for assigning a view to an activity. (Column 2, lines 18-20) The view configurer of *Bowman-Amuah*

receives notification of a startup event of an activity and a reference to a first instance of an object created by the startup event, and which view to launch is determined in response to the receipt of the notification and the reference based on predetermined criteria. (Column 2, lines 20-24; Column 252, lines 4-8) According to *Bowman-Amuah*, an Activity is business logic, bundled separately from the presentation logic, that is responsible for tasks such as managing client logical units of work, maintaining client representation of a business model, validation across multiple interfaces (complex business logic), error and exception handling, communication with server and other services, creating other Activities, and triggering events to be "caught" and acted on by the presentation logic. (Column 248, lines 8-20) Nowhere does *Bowman-Amuah* disclose, teach, or suggest any kind of state-based execution of Activities, although *Bowman-Amuah* does generically describe the use of states and fields in interfaces such as windows and Web pages. (Column 36, lines 21-28; Column 101, lines 49-51)

According to *Bowman-Amuah*, a View Configurer listens to activity broadcasts to detect notifications of startup events for Activities and references to the new instances of objects that are created by these Activities. (Column 252, line 61, through Column 253, line 20) In response to the notification, the View Configurer determines which view to launch based on predetermined criteria. (Column 252, lines 21-22) The criteria may include, for example, user preferences, experience level, security profiles, or workflow settings. (Column 253, lines 22-25) The view is then attached to the underlying activity. (Column 253, lines 24-25) *Bowman-Amuah* also gives an example of retrieving an abstract interface based on an identifier for a concrete object using a map that associates abstract interfaces with concrete objects. (Column 191, lines 58-64)

Bowman-Amuah specifies that the relationship between Activities and the View Configurer is dictated by the Interface Control Model (ICM), also known as the MVC model, in which the Interface (Viewing portion) is separate from the Control and the Model (data portion) of an application. (Column 229, lines 32-34; Column 252, lines 36-48) Thus, according to *Bowman-Amuah*, "an activity doesn't know about the existence of the View Configurer." (Column 252, lines 63-64) Instead, the View Configurer "listens to activity

broadcasts such as when the controller starts up." (Column 252, lines 64-65) According to *Bowman-Amuah*, an activity opening up its own view "violates the ICM approach, because then the model is talking directly up to the view." (Column 252, lines 30-32)

Bass discloses a network that uses two channel adapters to couple the publication and subscription systems together via the Internet. (Abstract, lines 1-3) The channel adapters act as a proxy or an agent for communications and data exchanges between the business applications. (Column 3, lines 23-25) *Bass* provides no disclosure, teaching, or suggestion about the processes or applications used by the systems other than the adapters. Consequently, *Bass* provides no disclosure, teaching, or suggestion with respect to workflows, activities, or views over and above that provided by *Flores* or *Bowman-Amuah*.

Thus, the combination of *Flores*, *Bowman-Amuah*, and *Bass*, whether considered by themselves or in combination with knowledge generally available to those of ordinary skill in the art at the time of the invention, fails to disclose, teach, or suggests numerous limitations recited in Applicants' claims for at least the following reasons.

1. None of the references discloses, teaches, or suggests a process module with states, each of which comprises a view identifier

Flores does not disclose, teach, or suggest a process module having states defining portions of a business process. *Flores* discloses workflows associated with a business process, which may have states, but *Flores* does not disclose any association between the states of a workflow and a particular view associated with that state, much less a view identifier. *Bowman-Amuah* also does not disclose, teach, or suggest a process module having states defining portions of a business process. *Bowman-Amuah* discloses activities associated with a business process, but it does not provide any disclosure that such activities have states or that there is any connection between those states and a corresponding view. Nor does the limited disclosure that *Bowman-Amuah* provides on state-based handling of windows and Web pages disclose, teach, or suggest the recited process module having states corresponding to portions of a business module, much less a view identifier for each state. Consequently, the combination of *Flores* and *Bowman-Amuah* fails to disclose, teach, or suggest "a process module having a plurality of states, each state comprising logic defining a portion of a

business process and further comprising an identifier of a corresponding view to be presented to a user," as recited in Claim 1 or the analogous limitations and additional features recited in other claims, such as Claim 3-5, 8, 11, 15, and 17. Nor does *Bass* provide any disclosure, teaching, or suggestion that would, separately or in combination with the other references, remedy these deficiencies.

2. The combination of references does not disclose, teach, or suggest view identifiers comprising logical specifications of views.

As noted above, the combination of references fails to disclose, teach, or suggest a process module having states comprising view identifiers. Thus, the combination of references also fails to disclose, teach, or suggest the additional feature that such identifiers comprise a logical specification of the view that can be used by another component (such as a controller) to generate a view. Therefore, the combination of references does not disclose, teach, or suggest particular limitations relating to the logical specifications recited in Applicants' claims, such as those recited in Claims 1, 3-4, 8-11, 15-17, and 20.

3. The combination of references fails to disclose, teach, or suggest receiving a view identifier from a process module

As noted above, none of the references discloses a process module having states defining portions of a business process. Although *Flores* discloses workflows associated with a business process, it does not disclose, teach, or suggest that such workflows communicate view identifiers in any manner whatsoever and, therefore, it cannot possibly show the recited limitation of receiving such identifiers. Similarly, *Bowman-Amuah* discloses activities associated with a business process, but those activities do not communicate view identifiers. Although the View Configurer does listen for broadcast messages from activities, those messages only indicate that activities have started up and identify the object created by the startup of activity. They do not identify a corresponding view, nor do they provide a logical specification of that view. *Bass* does not disclose, teach, or suggest any application with states related to a business process at all, much less the recited process module, and therefore cannot possibly teach receiving view identifiers from such a module. Therefore, the combination of references fails to disclose, teach, or suggest

"receiving a view identifier from the process module," as recited in Claim 1, or similar limitations recited in Claims 2-5, 8, 11, 15, and 17.

4. The combination of references fails to disclose, teach, or suggest generation or selection of views based on a logical specification of the view in a view identifier

As noted above, none of the references discloses, teaches, or suggests, a view identifier comprising a logical specification of the view. Furthermore, none of the references discloses, teaches, or suggests the generation of a view from a logical specification of the view in a view identifier. In each of the references, the parameters for the view are generated by an autonomous module that determines the parameters for the view. In *Flores*, the View is a separate user interface module that receives data from other modules, but not view specifications. *Bowman-Amuah* discloses the generation of a view from an abstract interface identified in a map between concrete objects and abstract interfaces, but there is no relationship between the information provided in the identifier and the view thus generated. *Bass* teaches autonomous adapters that generate views in response to data, but the adapters do not receive logical specifications of the view from outside modules. Therefore, the combination of references fails to disclose, teach, or suggest an element that "generates views for the user that are based on the logical specifications of the views in the view identifiers," as recited in Claim 1, or similar limitations in Claims 3-4, 8-11, 15-17, and 20.

5. The combination of references does not disclose, teach, or suggest additional subject matter of the dependent claims.

The claims that depend on independent claims 1, 4, 8, and 15 include all of the limitations of the claims upon which they depend and, accordingly, they include all of the elements of those claims that are not disclosed, taught, or suggested by the combination of references relied on by the Examiner. For at least that reason, they are allowable over the cited references. But the combination of references also fails to disclose additional features recited in the dependent claims. For example, the combination of references fails to disclose, teach, or suggest the second controller as recited in Claim 3, accessing a business application software module to determine which view identifier to generate as recited in Claim 5, and

various other limitations which are distinguishable from the combination of references for reasons analogous to those stated above. For at least the foregoing reasons, the combination of references fails to disclose, teach, or suggest the limitations recited in the dependent claims.

The Proposed Combination or Modification Would Change the Principle of Operation of At Least Two of the References

Even if the combinations or modifications of *Flores* and/or *Bowman-Amuah* proposed by the Examiner disclosed, taught, or suggested the limitations recited in Applicants' claims, which they do not, the proposed combinations or modifications would still be insufficient to support an obviousness rejection of the claims because each of the proposed combinations or modifications would change the principle of operation of at least two of the combined or modified references. A proposed combination or modification that modifies the principle of operation of any of the references is insufficient to support a *prima facie* case of obviousness.[1] The combination of references proposed by the Examiner would change the principle of operation of at least two of the references, and is therefore insufficient to render the claims obvious, for at least the following reasons.

1. The Workflow Application Builder of *Flores* operates according to the MVC paradigm

The Examiner has proposed that the workflow application builder of *Flores* could be suitably modified to produce the recited elements of several claims. However, the workflow application builder of *Flores* operates according to the MVC paradigm, which separates the model of an application from the view of that application and allows portability of the application between environments. To modify the workflow application builder of *Flores* such that the model portion of the application would communicate messages containing a logical specification of the view to the view portion of the application would necessarily violate the MVC paradigm. Thus, any such modification would change the principle of

---

[1] As noted in the Manual of Patent Examining Procedure (M.P.E.P.) § 2143.01, "'[i]f the proposed modification or combination would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.' *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (C.C.P.A. 1959)."

operation of *Flores* from the MVC paradigm to some other principle of operation, and the proposed modification is therefore insufficient to support an obviousness rejection.

2. The View Configurer of *Bowman-Amuah* operates according to the ICM/MVC approach

The View Configurer of *Bowman-Amuah* monitors a system for broadcasts associated with the startup of activities (in the model layer) and generates a view in response to the startup. This allows the View Configurer to generate views without direct communication between the activity and the view in accordance with the ICM/MVC approach, which in turn permits the activity portion of the application to be portable to a variety of different environments. The Examiner proposes that the View Configurer of *Bowman-Amuah* might be modified to produce the recited limitations of several claims. But the modification of the teaching of *Bowman-Amuah* such that the activity communicated a message that included a logical specification of the view would violate the ICM/MVC approach. The proposed modification would change the View Configurer from a component that passively observes system broadcasts, allowing it to be functionally separate from the activities, into a component that actively exchanges information related to the view function with activities in the model portion of the application. Thus, the proposed modification would modify the principle of operation of the View Configurer, and therefore, the proposed modification is insufficient to support an obviousness rejection.

For at least the foregoing reasons, the proposed combinations or modifications of *Flores* and *Bowman-Amuah* relied on by the Examiner as purportedly teaching the limitations recited in Applicants' claims modify the principle of operation of at least two of the references, and the proposed combinations or modifications are therefore insufficient to support an obviousness rejection of the claims.

The References Teach Away from the Proposed Combination

Even if the combinations of *Flores* and/or *Bowman-Amuah* proposed by the Examiner disclosed, taught, or suggested the limitations recited in Applicants' claims, which they do not, the proposed combinations would still be insufficient to support an obviousness rejection

of the claims because, for each of the proposed combinations involving a reference, at least one of the combined references teaches away from that combination. A proposed combination to show obviousness is improper where one or more of the references teach away from the proposed combination.[2] The combinations proposed by the Examiner are improper, and therefore insufficient to render the claims obvious, for at least the following reasons.

1. *Flores* teaches the use of the MVC paradigm

As noted above, *Flores* specifically discloses that the workflow application builder operates according to the MVC paradigm, and indeed, this is what permits the portability of applications designed using the workflow application builder. Thus, *Flores* teaches away from any modifications that involve communication of view information between the model portion of an application and the view portion of an application, including the modifications of the workflow application builder proposed by the Examiner to attempt to meet the recited limitations of the rejected claims. Because *Flores* teaches away from the proposed modifications, the proposed modifications are an improper basis for the obviousness rejection.

2. *Bowman-Amuah* teaches the ICM/MVC approach

Bowman-Amuah discloses that the View Configurer operates according to the ICM/MVC approach, and indeed, this is what permits the portability of the activity-View Configurer combination taught in *Bowman-Amuah*. Thus, *Bowman-Amuah* teaches away from any modifications that involve communication of view information between the model portion of an application and the view portion of an application, including the modifications of the View Configurer proposed by the Examiner to attempt to meet the recited limitations of the rejected claims. Because *Flores* teaches away from the proposed combinations, the proposed combinations are an improper basis for the obviousness rejection.

---

[2] As stated in M.P.E.P. § 2145(X)(2), "'[i]t is improper to combine references where the references teach away from their combination.' *In re Grasselli*, 713 F.2d 731, 743; 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983)."

For at least the foregoing reasons, *Flores* and *Bowman-Amuah* teach away from all of the Examiner's proposed combinations and, therefore, the proposed combinations are insufficient to support the obviousness rejection of Applicants' claims.

CONCLUSIONS

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending Claims.

If the Examiner believes that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to call the undersigned attorney for Applicants at the Examiner's convenience.

A check in the amount of $86.00 is enclosed to cover the fee for an additional independent claim. No other fees are believed to be due, however, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Applicants

Christopher W. Kennerly
Reg. No. 40,675

2001 Ross Avenue, Suite 600
Dallas, Texas 75201-2980
(214) 953-6812

Date: 2/4/04

CORRESPONDENCE ADDRESS:

Customer Number: 05073